1Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 46.

February, 1944.

No. 542.

A NEW SPECIES OF BAPTISIA

WILBUR H. DUNCAN

In the summer of 1942 specimens of a strange Baptisia in flowering condition were collected ten miles south of Jesup in Wayne County, Georgia. This plant was quite abundant in an open, pine woods on a low, sandy ridge. Another visit was made to the area on September 3, 1942, and collections were made of the plant in fruiting condition. No other species of Baptisia was located in this immediate area. All of the specimens from the above two collections were later lost in the mail but other specimens were obtained on July 4, 1943. A careful survey revealed plants over an area about ten miles in length.

It readily became evident that this *Baptisia* had not been described. The plants possess only simple leaves which lack completely the perfoliate character of those of *B. perfoliata* (L.) R. Br., which it most nearly resembles from a distance. Another character which strikingly separates this new species from other simple-leaved species is the presence of cobwebby and closely appressed hairs over all surfaces of the entire plant. Furthermore, nearly all the leaves are cordate. Thus, in the latter two characters this species is unlike either *B. perfoliata* or *B. simplicifolia* Croom, the two species previously described as characteristically possessing simple leaves.

The plant is described as follows:

Baptisia arachnifera, sp. nov. (Figs. 1-5), plant 5-8 dm. tall, retaining color upon drying, entirely covered with cobwebby (or wooly) and closely appressed hairs (only the stamens, petals, and inner part of calyx-tube glabrous); stem fairly stout, lightly

ribbed, widely branched, the branches ascending and arising alternately from the primary stem or stems; leaves simple, ashy green, slightly yellowish beneath, later becoming much darker, covered throughout with hairs, mostly cordate (those near the base rarely somewhat reniform, those near the top sometimes ovate), leathery, strongly veined, somewhat clasping at the base, rounded at apex, the margins entire and sometimes slightly revolute, 2–8 cm. long, 1.5–7 cm. broad; racemes terminal,

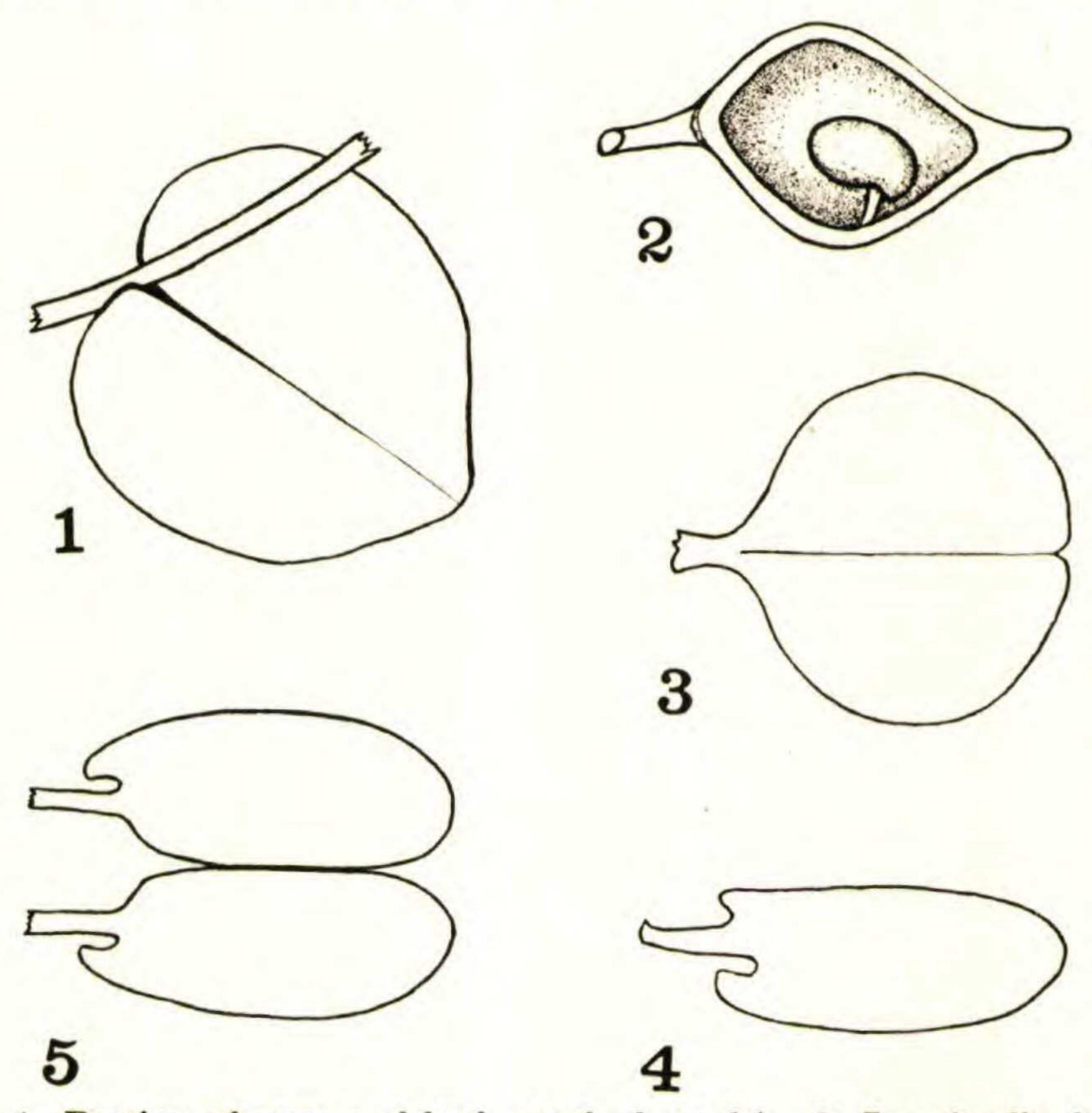


Fig. 1. Portion of stem and leaf attached, $\times \frac{1}{2}$. 2. Longitudinal section through fruit showing a single seed, $\times 2\frac{1}{2}$. 3. Standard of flower, $\times 2\frac{1}{2}$. 4. Wing of flower, $\times 2\frac{1}{2}$. 5. Keel of flower, $\times 2\frac{1}{2}$.

compact, 3–20 cm. long; flowers pedicellate, pedicels 1–5 mm. long, the lowermost subtended by suborbicular, foliaceous bracts up to 10 mm. long and 12 mm. broad, the uppermost by ovate bracts 3 mm. long and 1.5 mm. broad; calyx campanulate, about 5 mm. long, the inner part of the tube glabrous, lobes about as long as tube, the upper lip broad and entire or minutely cleft, the lobes of the lower lip broadly lanceolate; corolla yellow, standard orbicular and emarginate (11 mm. long, 10 mm. broad), wings and keel oblong (about 13 mm. long and 5 mm. broad); pod quite hairy without, closely pubescent inside, irregular in shape, varying from subglobose to ellipsoid, body 8–15 mm. long

and 6-10 mm. broad, the beak about 3 mm. long and mostly

straight, the stipe 4-6 mm. long.

Herba 5-8 dm. alta, omnino dense appresso-tomentosa; caule crassiusculo, leviter striato, late ramoso, ramis alternatis, ascendentibus; foliis 1-foliolatis, dilute viridibus, subtus paulo lutescentibus, plerumque cordatis (infimis raro subreniformibus, supremis interdum ovatis), coriaceis, valde nervatis, basi caulem subamplectentibus, apice late rotundatis, margine integris et interdum paulo revolutis, 2-8 cm. longis, 1.5-7 cm. latis; racemis terminalibus, 3-20 cm. longis; floribus pedicellatis, pedicellis 1-5 mm. longis, bracteolatis; calyce campanulato, ca. 5 mm. longo, extus dense pubescente, intus glabro, laciniis tubum subaequantibus, labio superiore lato, integro vel paululo emarginato, laciniis inferioribus late lanceolatis; corolla flava, vexillo orbiculari et emarginato (11 mm. longo, 10 mm. lato), alis carinaque oblongis (ca. 13 mm. longis et 5 mm. latis); legumine extus dense pubescente, intus molliter pubescente, subgloboso vel ellipsoideo, 8-15 mm. longo et 6-10 mm. lato, rostro 3 mm. longo et plerumque recto, 4-6 mm. stipitato.

Distribution: on sandy soil, mostly in open, pine woods, occasionally in denser, mixed woods; Wayne County, Georgia.

The type specimen (sandy soil in open, pine woods, July 4, 1943, Duncan 5693) is deposited at the Gray Herbarium, Cambridge, Massachusetts, U. S. A. Isotype specimens are being distributed in the Plantae Exsiccatae Grayanae.

The author wishes to acknowledge the valuable aid afforded by "Monograph of the Genus Baptisia", Annals Missouri Botanical Garden 27: 119–244, April, 1940, by M. M. Larisey; and for specimens loaned by the Missouri Botanical Garden. Thanks are gratefully given to Dr. Lyman B. Smith of the Gray Herbarium for assistance in the preparation of the manuscript and in distribution of specimens.

University of Georgia and United States Public Health Service.

ASTER acadiensis nom. nov. A. lateriflorus var. tenuipes Wiegand, Rhodora 30: 174, 1928. A. tenuipes Shinners, Rhodora 45: 346, 1943; non A. tenuipes Makino, Bot. Mag. Tokyo 12: 64, 1898.

I am indebted to Miss Marjorie W. Stone and to Mr. C. A. Weatherby for bringing the above error to my attention.—L. H. Shinners, Madison, Wisconsin.